

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT ARIZONA STATE OFFICE EVALUATION REPORT TITLE PAGE		Date: October 21, 2015
Title/Subject: Las Cienegas Resource Management Plan Evaluation		
Type of Evaluation: Periodic		
Dates Conducted: August 12 to 16, 2013		
Conducted By: BLM, Arizona State Office		
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I. Introduction

On July 25, 2003, the BLM signed a Record of Decision (ROD) for the Las Cienegas Resource Management Plan (RMP). The BLM prepared an Environmental Impact Statement (EIS) to support the RMP, which provided management direction for 49,000 acres of BLM-administered land in south-central Arizona within the Las Cienegas National Conservation Area (LCNCA) and Sonoita Valley Acquisition Planning District (SVAPD). The RMP replaced a portion of the Phoenix RMP (1988).

The LCNCA was established by Congress December 6, 2000, in Public Law 106-538. The LCNCA was created to protect and enhance the unique and nationally important aquatic, wildlife, vegetative, archaeological, paleontological, scientific, cave, cultural, historical, recreational, educational, scenic, rangeland, and riparian resources and values.

Purpose

BLM planning regulations require a periodic evaluation of land use plans and environmental review procedures to determine the status of ongoing plan implementation, conformance and monitoring (43 CFR 1610.4-9). The BLM planning handbook (H-1601-1, V. B.) states:

“Evaluation is the process of reviewing the land use plan and the periodic plan monitoring reports to determine whether the land use plan decisions and NEPA analysis are still valid and whether the plan is being implemented. Land use plans are evaluated to determine if: (1) decisions remain relevant to current issues; (2) decisions are effective in achieving (or making progress toward achieving) desired outcomes; (3) any decisions need to be revised; (4) any decisions need to be dropped from their consideration; and (5) any areas require new decisions...The plan should be periodically evaluated (at a minimum every 5 years) as documented in an evaluation schedule.”

This report is the 10 year evaluation of the RMP, as the usual 5 year evaluation was not conducted, fulfilling BLM’s duties under 43 CFR 1610.4-9. This evaluation is the first evaluation of this RMP.

In addition to the objectives above, the Tucson Field Office (TFO) seeks to use this plan evaluation in three ways: 1) to gain a greater understanding of the effectiveness of the Biological Planning system in place; 2) to establish a baseline for the next evaluation; and 3) to develop communications material regarding plan implementation and effectiveness to be shared with stakeholders.

Conduct of Evaluation and Review

The LCNCA RMP evaluation team was comprised of: Chris Horyza, (Arizona State Office Planning and Environmental Coordinator (P&EC)) Amy Markstein (Tucson Field Office Assistant Planning Lead) and Karen Simms (Tucson Field Office, Assistant Field Manager). The team met via teleconference and communicated through email several times during the third quarter of FY2013. On August 12-16, 2013, the P&EC met with TFO staff and LCNCA partners and conducted interviews using questions previously agreed to by the TFO and P&EC. TFO staff included the resource specialists, managers, and team leads that are all involved in LCNCA operations.

The evaluation interview week was kicked-off by meeting with: Tim Shannon (Gila District Manager), Dennis Sylvia (Gila Associate District Manager), David Baker (acting Tucson Field Manager), and Karen Simms (Tucson Assistant Field Manager). The concept of the Plan Evaluation was discussed, along with the schedule and expected products. Appendix A contains the schedule of interviews for the week.

Due to time constraints, some staff and partners who could not be interviewed during the scheduled week were provided with questionnaires and either replied in writing or were interviewed by a TFO representative at a later date. Key partners that were interviewed included: the Audubon Research Ranch, the Cienega Watershed Partnership, the operator of the Empire Ranch grazing allotment, representatives of the Natural Resource Conservation Service, Frog and Fish Restoration Outreach Group, the Empire Ranch Foundation, U.S. Fish & Wildlife Service, and the Arizona Game and Fish Department (AGFD).

Survey and Interview Questions

Prior to the interviews, questionnaires were sent to resource specialists, key cooperators, and managers who work with or have knowledge of the RMP to help focus the evaluation. There were some general questions to recipients and also some customized groups of questions based on the relevant subject matter expertise of some recipients. These questionnaires and subsequent interviews addressed the topics outlined in the Bureau's H-1601-1 Land Use Planning Handbook, Section V, B, 1.

II. Results of General Questions

The results of the evaluation are organized below by resource. All partner input is addressed in Section IV.

1. Have Las Cienegas RMP decisions been implemented and are they effective in protecting the resources of the NCA?

For the most part, staff agreed that most of the RMP decisions have been implemented to some degree. A few have been fully implemented, many are currently being implemented, (“a work in progress”) while some decisions have not been implemented at all. Funding, staffing, and national, state, and local priorities all contribute to which decisions are implemented.

As to their effectiveness, there was some variation. Most decisions are viewed as effective in meeting objectives, with a few notable exceptions:

- a. Many of the recreation decisions have not been fully implemented, and may not meet public need if they were. Further, there appears to be differences in opinion concerning the appropriate ways to manage recreation and the appropriate kinds of recreation to provide.
- b. Road maintenance, or the lack of it, and the lack of engineering design for roads, is having adverse environmental effects and may be limiting our ability to meet some RMP objectives.
- c. Some objectives aren’t clear in the way they apply to activities on the ground and implementation has occasionally broken down. There has occasionally been disagreement on “... RMP sub-objectives (i.e. upland restoration, riparian areas, bosques, sacaton, bottoms, swales, drainages, etc.) ... RMP objectives can be too general at times, difficulties arise when translating objectives down to specific vegetation treatments or specific habitat improvement projects, some things get lost in translation.”
- d. Climate change may make some of the Desired Future Conditions unreachable. There is a need to incorporate climate change and associated plant community dynamics into Desired Future Conditions so they can continue to be relevant.

2. Does the plan establish desired outcomes (i.e., goals, standards, and objectives)? Are these still valid or do they need updating due to new information or changing conditions?

The plan does establish desired outcomes for most resources. Some resource uses do not have desired conditions established, notably lands.

Most desired outcomes remain valid. As noted above, some may need to be updated in light of climate change. However, the adaptive management approach utilized, especially through the biological planning process, provides flexibility for making periodic adjustments as we learn from monitoring and other studies. As we learn and make adjustments in practice, the RMP should also be updated.

As noted above, the desired outcomes for recreation may not be reachable using the current RMP decisions. There appears to be a disconnect between the way the recreating public wants to use the LCNCA, the way our decisions prescribe use, and the desired outcomes for recreation.

3. Does Las Cienegas RMP have an implementation schedule? Is the Implementation schedule current? Has BLM included stakeholders input in the development of the implementation schedule and updates?

To the person, there seems to be no knowledge of an implementation schedule or strategy.

4. Are the RMP allocations, constraints, planned actions, or mitigation measures effective in achieving (or making progress towards achieving) the desired outcomes? This determination is often made based on information obtained from resource assessments.

Most people thought that they are effective. There seems to be differences in how people understand them, or how the RMP is interpreted when site-specific projects are designed to implement the RMP. There was a suggestion to portray the objectives as a GIS layer so the geographic extent for where the objective applies can be readily ascertained. In addition, there may be new information as to where some of the important plant communities are, such as a sacaton study by The Nature Conservancy. There was also a suggestion that the LCNCA could use a better, more precise vegetation layer that delineates the boundary between mesquite bosques, uplands, riparian, etc.

5. Have there been significant changes in the related plans of Indian tribes, State or local governments, or other Federal agencies?

Most people agree that there haven't been changes to plans of other agencies that might affect changes to the LCNCA RMP. However, there are a few plans that have been completed and some activities underway by other entities that should be considered:

1. The new AZGFD wildlife strategy should be reviewed.
2. Need to stay connected with the new Coronado National Forest Plan to be sure it is consistent.
3. Pima County's Sonoran Desert Conservation Plan should be reviewed to see if it has any effect on LCNCA. Need to maintain coordination with Pima County.
4. Should stay current with the USFS Firescape Planning.
5. Planning by the Audubon Research Ranch, especially as pertaining to fire.

6. Are there new data or analyses that significantly affect the planning decisions or the validity of the NEPA analysis?

For the most part, new data hasn't affected the validity of the impact analysis or plan decisions. There were a few examples of new information that should be considered:

1. Removal of cattle in the riparian area has resulted in a change in riparian vegetation that is resulting in stream shading and loss of Gila topminnow habitat. This effect was not expected or analyzed.
2. The Fire, Fuels, and Air Quality RMP amendment may have better defined fire management actions.
3. Monitoring the effects of implementation actions and methods have changed implementation approaches.

7. Are there unmet needs or new opportunities that are not addressed in the current RMP?

A few opportunities were identified by staff:

1. Re-evaluate the effects of livestock removal from riparian areas
2. Re-consider what is needed to maintain sacaton bottoms, and identifying in more detail where they are.
3. Consider the possibility of biomass utilization in conjunction with meeting vegetation objectives.
4. Incorporation of climate change into desired outcomes and consideration of ecological resilience so the environment can respond to whatever changes come along. Use regional models to evaluate possible future scenarios.
5. Consider “adaptive reuse” for historic buildings.
6. Reclassification of 5 specific cultural sites for education and interpretation.

8. If a new RMP were to be prepared list the issues that you expect would need to be addressed.

A few issues and new agency policies have emerged since the RMP was finished:

1. The RMP does not address renewable energy.
2. Introduction of prairie dogs – how do we determine when we have achieved our objectives? When do we say “enough is enough”?
3. Adapting to climate change.
4. Effects of Rosemont Mine.
5. Bio-mass utilization.
6. Definitions and GIS delineation of:
 - a. Riparian areas
 - b. Mesquite bosques
 - c. Grasslands
 - d. Sacaton bottoms
7. Objectives for migratory bird management.
8. Update priority species list and review objectives for guidance concerning habitat management such as fragmentation and connectivity.
9. May need to update fire section to incorporate national fire plan policies, guidance, and priorities. Especially need to consider discussions on the Wildland Urban Interface.
10. Consider recreation activities in relation to cultural resources impacts.
11. Reconsider if prescribed fire is meeting resource objectives.
12. Reconsider if mesquite removal and grassland restoration is meeting vegetation and other resource objectives.

9. Is there data that you can identify specifically that is needed to help understand, clarify, or define a given issue? Is there existing data, or a plan to gather data about the issue?

Some data needs were suggested to help clarify above issues. Suggestions about data generally were about analysis of existing data:

1. Rainfall data needs to be analyzed.
2. Stream discharge data analyzed for trends.
3. Assess rate of invasion of mesquite into sacaton bottoms.

4. Data to refine climate models to a more local scale.
5. Natural Resources Conservation Services ecological site models and State and Transition models.
6. As-built drawings for historic buildings and sites.
7. Data on natural erosion processes and effects to cultural resources.
8. Data on cultural landscapes.
9. Data on recreation site use and impacts

10. Which current RMP decisions in the plan do you consider to be the highest priority to implement?

As expected, each specialist had opinions of the most important decisions biased by their resource or resource use. But, this gives a good window into priorities within resource disciplines. Priorities identified were for decisions pertaining to:

1. Acquisition
2. Upland restoration
3. Beaver reintroduction
4. Road maintenance
5. Biological planning
6. Livestock utilization limits
7. Protection and restoration of native grasses
8. Stabilization of historic structures as funding permits
9. Complete the National Register nomination for the headquarters complex
10. Adaptive reuse of historic structures
11. Designations of administrative, historic, and recreation sites
12. More time, attention and funding on prehistoric cultural resources
13. Fire management, especially as it pertains to grassland restoration

11. Have the issues stated in the RMP been resolved?

Staff agreed that some issues have been resolved, but most are “works in progress”. Continuing implementation will continue progress on resolving issues.

12. Are there up-coming social/economic issues?

A few social and economic issues were brought up that might warrant consideration:

1. Development of the Rosemont mine, and to a lesser degree, development of a future Helvetia mine.
2. Expanding populations in Tucson and Sonoita Valley could increase recreation demand and expand Wildland Urban Interface.

13. What concerns do you have about the management of public lands on Las Cienegas NCA?

Pertaining generally to NCA management, staff had the following concerns:

1. Funding and staffing is always limiting to adequately implement the plan, and especially limits our ability to react to changing pressures from outside the NCA.

2. Increasing workloads reduces the ability for resources staff to be on the ground.
3. Vegetation treatments need to continue to be coordinated with livestock use so where and how much is treated doesn't cause undue impacts to livestock operator.
4. There is a constant tension in managing a multiple use landscape where actions that benefit one resource can adversely affect others.
5. The ability of BLM to manage the historic properties consistent with multiple legal mandates.
6. Need more law enforcement presence in LCNCA due to concerns about resource damage.
7. Would like to see LCNCA have a dedicated manager to give LCNCA issues more focused attention.

14. How effective has the biological planning process been in the implementation of flexible livestock grazing on the NCA? Are changes needed to the process?

Most specialists involved in the biological planning process have expressed that they find the process effective in resolving conflicts and to get public input to ongoing actions. There was some concern that the process hasn't worked for recreation management, but most other resource disciplines involved are pleased with the process. A few suggestions for improvement were made:

1. Follow-up to meetings and input seems to be lacking. May need a more structured process for decision making that will encourage a shorter decision timeframe and provides a mechanism to communicate back to the stakeholders how data translated into decisions.
2. Consider how, or if, including other allotments could be done. Maybe one process NCA wide?
3. Some people thought there were too many meetings and once a year would be sufficient, and others felt there weren't enough and 3 times a year might provide more flexibility in where the group did field visits and what they discussed.

15. Does monitoring in the RMP tie to desired outcomes? Are new inventories or monitoring needed based on new information or changing conditions? Does monitoring data inform decision making?

Most respondents thought monitoring tied well to desired outcomes in the RMP and that it informed decision making. There were a few suggestions for additional monitoring or inventories:

1. Need better summarization of rainfall data and livestock utilization, especially as it pertains to fire treatments. Need to better assess what the data is telling us concerning vegetation treatment success.
2. Summarize information pertaining to the pronghorn herd and assess what we might need to do to maintain the herd.
3. Always room for more cultural inventories under section 110.

16. Are monitoring studies and adaptive management practices and triggers in place to assess and respond to changes to conditions?

Most staff thought the adaptive management defined in the RMP was good and effective in responding to changing conditions and new information. There were a few suggestions:

1. The RMP could do a better job of “if, then” statements (triggers and thresholds) concerning how to respond to changing conditions or new information. This would include better definition of thresholds.
2. Need to incorporate potential climate change scenarios into adaptive management considerations.
3. Operation of adaptive management may be too dependent on certain people and their continuity, for example Karen Simms. May need to explore how continuity in the process can be maintained regardless of changes in BLM or other staff or managers. Assure it is not dependent on one person who understands how adaptive management has been applied in implementation of the RMP.
4. It has worked well over the last 10 years, but some of the triggers may need to be revisited for it to survive the next 10 years or beyond.

III. Results by Resource

Cultural Resources

Tucson Field Office Archeologist, Amy Sobiech, was interviewed concerning cultural resources. For the most part, she feels cultural resources were well addressed in the RMP and decisions concerning cultural resources remain relevant. There are a few points upon which the RMP could be improved.

Known cultural resources were assigned to use categories. But, sites projected to occur or unknown were not. They are assigned as they are found.

Management decisions concerning particular properties are focused on historic properties. Little is said about prehistoric sites. This applies to use categories as well. There have been some new opportunities to use sites for education or interpretation that were not supported by RMP use categorization.

Impact description in the RMP lacked specificity and may not be fully addressed. This may be most true for recreation impacts to cultural resources. We should be able to learn from what has happened over the last 10 years.

Most areas considered for special designation in the plan are adequate, but could use more facilities, such as interpretation, signs, kiosks, etc. We should consider adding Mattie Canyon as well.

As everywhere, additional 110 inventories would be helpful in learning more about the cultural resources. They would be especially helpful if we want to understand and manage for cultural landscapes.

No ACEC specific plans have been written for any of the identified ACECs, would like to see plans for Mattie Canyon and Hummel House.

Fire & Fuels

Gila District Fuels Program Manager, Dan Quintana, was interviewed concerning fire and fuels. The Las Cienegas RMP was completed before the “Arizona LUP Amendment for Fire, Fuels, and Air Quality Management” (Amendment) was finished and was amended by the Amendment as a result. For that reason, many fire and fuels related decisions come from that document. The Amendment is largely implemented through the grassland restoration projects which were defined in the RMP. The decisions in the RMP and guidance in the Amendment allow managers to refine projects and meet most management objectives. Dan believes that, between the RMP and the Amendment, requirements in the National Wildland Fire Policy are being met.

Generally, Dan believes the plan is good and has the following suggestions for improvement:

1. Don't put acreage limits on treatment size,
2. Don't use fire line intensity levels to limit fire prescriptions,
3. Use resource objectives to define fire prescriptions, not arbitrary limits.

Lands & Realty

Tucson Field Office Lands and Realty Specialist, Linda Dunlavey, was interviewed concerning Lands and Realty (L&R). Since the NCA was designated to protect particular resources, the RMP places considerable constraint on L&R actions. The predominant actions defined by the RMP pertain to land acquisition, and defined utility corridors. While the NCA is treated as an avoidance area for renewable energy proposals, there are no specific decisions in the RMP pertaining to the Bureau's energy policy. However, she feels the RMP provides adequate guidance to the L&R program.

Livestock Grazing

Tucson Field Office Rangeland Management Specialist, Kristen Duarte, was interviewed pertaining to the grazing program. Kristen generally feels the RMP provides adequate guidance and the objectives are still valid. She does think the objectives need to be adjusted to consider climate change, and that incorporating information from the Natural Resources Conservation Services State and Transition models could help. Kristen notes that the Land Health Standards have been incorporated into the RMP, as well as the Arizona Guidelines for Grazing Management, but is concerned that other resource disciplines may not realize that the Land Health Standards also apply to them and their resource or resource use.

Paleontological Resources

Tucson Field Office Archeologist, Amy Sobiech, was interviewed concerning paleontological resources. The RMP is pretty general concerning paleontological resources. It addresses how to treat ground disturbing activities and fossils, but it is not very specific. Paleontological resources were not allocated to any use categories.

Recreation

Tucson Field Office Outdoor Recreation Planner, Catie Fenn, was interviewed concerning Recreation. She feels the recreation decisions in the RMP are not meeting public demand. She also is concerned that the allocations and actions defined are not designed appropriately to achieve recreation objectives. Overall she is concerned that recreation is not a priority in the RMP. It is her opinion that recreation should be revisited.

She recommends a number of updates to the plan, including: revisit the zone plans, update and clarify guidance for Special Recreation Permits (SRPs), revisit the Wilderness Characteristics Inventory and Visual Resources Inventory, consider adding supplemental rules, and rename some administrative sites that are actually historic sites as "historic sites".

She suggests that the majority of the recreation program has not been implemented since the plan was approved, and in particular the road system has not been completed. She feels project management on the NCA needs to be improved. It has been a challenge for park rangers and law enforcement to implement RMP decisions without updated supplemental rules.

She suggests there are some unmet data needs, including an assessment of BLM's own water use on the NCA, and the impact of recreation (including a specific look at dispersed recreation as well as educational groups) after the recreation decisions in the RMP have been mostly implemented. She is unsure of the success of the biological planning process, and notes that the structure and communication for integrating data into the decision making needs to be improved.

She suggests that the most important implementation priorities for recreation are: enhancement of the Airstrip group site, completion of already designated recreation sites, completion of the road network with signage and appropriate infrastructure, completion of the Heritage Discovery Trail, and reassessment of the adaptive reuse plans.

Riparian

Assistant Field Manager Karen Simms, Tucson Field Office Fisheries Biologist Jeff Simms, and Assistant Planner Amy Markstein were interviewed for riparian resources. The riparian worksheet is used by the Washington Office as a proxy for evaluation of the RMP. The riparian worksheet was completed, signed by the acting Field Manager and the state Soil, Water and Air lead, and submitted to Washington Office to document the RMP evaluation. It is attached as Appendix B.

For the most part, the riparian area is responding well to management and several activities have been undertaken to implement the RMP. A few emerging stressors were identified that may require attention in the form of a plan amendment, such as climate change, affects resulting from the Rosemont mine, and the need to perfect the Federal reserved water right to address potential ground water overdrafting that might affect stream flows.

Soil, Water and Air

Ben Lomeli, Tucson Field Office Hydrologist, provided written comments regarding soil, water and air resources.

Overall Ben feels the plan does establish fairly clear outcomes for these resources. He expressed concern, however, about a number of implementation actions that were undertaken in the initial years following the adoption of the RMP. He believes that several of the first mesquite removal units failed to respect the drainages, mostly with xeric-riparian vegetation.

He believes that several watershed, minimal instream flows and groundwater issues remain unaddressed, and that these resources remain unprotected. Overall he feels that the long-term water availability for LCNCA is in question due to climate change, increased population and development, and the predicted aquifer depletion and dewatering of already diminishing surface waters should the proposed Rosemont mine carry forward. It is his opinion that the BLM should perfect a federal reserved water right for groundwater and instream flows as required by 7250 - BLM Water Rights Manual (P), sections 1.4 B-17 and 1.5A-1 & 1.5A-7; (9/30/2013; Rel. No. 7-110).

He feels that robust and effective monitoring is ongoing and has been a strength of the biological planning process. He does, however, feel that more specific thresholds would help better implement

adaptive management. He also feels it is necessary to complete an analysis of hydrologic monitoring data of groundwater levels and streamflows.

Moving forward with implementation he feels that all decisions associated with watershed conditions, groundwater levels, baseflows, wetlands, and upland and riparian vegetation should be prioritized. He recommends monitoring and mitigation of potential impacts of new road improvements along the South road, and watershed improvement and erosion control work upstream of these improvements, and in other areas. This should include reconnaissance, planning, permitting and implementation. He believes the RMP must address climate change, increased border issues, and increased recreation pressures into the future.

Special Designations

Nobody was interviewed specific to special area designations, but Jeff Simms provided written answers to interview questions.

There are two ACECs (Area of Critical Environmental Concern) within the NCA, and both were created before the LCNCA RMP. The entire NCA is one ACEC, and the RMP was specifically focused on the NCA. The Audubon Research Ranch encompasses the Appleton-Whittell ACEC, which it was largely ignored in the RMP because it was perceived there were no issues associated with it.

The Statewide Wild and Scenic River (W&SR) EIS, developed in the early 1990's, is still valid. There are no additional streams that need to be considered for W&SR eligibility.

Travel Management

Nobody was specifically interviewed concerning Travel Management, however discussion during several interviews indicates some persistent issues. The RMP decisions remain valid, but some implementation decisions that would be included in a Travel Management Plan might be considered for revision.

1. Road maintenance may be a cause of riparian degradation. Resources in the NCA would benefit from some road design re-engineering and specifics concerning road maintenance.
2. Some route network decisions have not been implemented. It might be worthwhile considering the route network in relation to RMP resource objectives to determine if changes in the route network are needed.
3. Some route closures (especially in the Narrows) have not been successful and it might be worthwhile reconsidering.

Tribal Interests

Tucson Field Office Archeologist, Amy Sobiech, was interviewed concerning tribal interests and relations. She tries to maintain relationships with local tribes and maintain a good rapport, even with changes in management within the tribe and BLM. They use some areas in the NCA for resource collection and are generally interested in NCA management.

Vegetation

Tucson Field Office Natural Resource Specialist, Heather Swanson, was interviewed pertaining to vegetation resources. She thinks the RMP generally provides adequate guidance concerning vegetation. She does have difficulty sometimes finding decisions and objectives that apply to vegetation because they are scattered throughout the plan. Vegetation decisions can be found in almost any resource category. From a document/decision organization standpoint, it might be helpful to have a crosswalk to vegetation decisions.

Heather feels the RMP provides the flexibility and guidance needed to meet objectives. Monitoring has been implemented and is tied to RMP objectives. She feels, however, that climate change needs to be incorporated into the RMP vegetation objectives.

Visual Resources

Tucson Field Office Outdoor Recreation Planner, Catie Fenn, was interviewed pertaining to visual resources management (VRM). In her opinion, VRM classifications may not be appropriate for some of the activities being undertaken. Some vegetation treatments are modifying the landscape and leaving unsightly residues that might not be consistent with the VRM objectives. Visual Resources Inventory (VRI) was not consistent with the current VRI national standards and my need to be redone to comply.

Wilderness Characteristics

The RMP was completed before guidance was issued pertaining to wilderness characteristics. Inventory for wilderness characteristics should be brought up to current standards consistent with national guidance.

Wildlife and Special Status Species

Tucson Field Office Fisheries Biologist, Jeff Simms, was interviewed concerning wildlife and special status species. His responses predominantly pertained to fish and aquatic species and habitats.

For the most part, the RMP provides adequate guidance. The RMP did not address the Audubon Research ranch in much detail and it may warrant further consideration. Some impacts from rapid riparian response and recovery of the riparian gallery forest were not anticipated or analyzed in the RMP EIS. In addition, erosion from tributaries into Cienega creek has been more severe than expected, with unanticipated effects to T&E species habitat.

Collaboration

Overall staff and collaborators interviewed feel that collaboration since the RMP was signed has been effective and useful. In particular, stakeholder engagement has been effective, partnerships and relationships have been built and strengthened, and joint research efforts have benefited. There are a number of suggestions to strengthen collaboration and new opportunities for future collaboration. These are detailed below. The biological planning process is discussed in detail in the following section.

1. Aspects of collaboration that could be improved

- **Communication:** More two-way communication; more frequent updates to partners; more communication among researchers.

- **Public education and information:** More information to public about projects and areas where cooperation is needed (i.e. exotic species); more awareness raising through partner events, social media, etc; better and more interpretation on NCA.
- **Outreach:** More outreach to public, other agencies, and other ranchers; need a Friends group; expand tribal outreach.
- **Partnerships:** Develop increased partnership with the University of Arizona; need to make it easier for partners and volunteers to work with BLM; clarify role of Sonoita Valley Planning Partnership.
- **Decision-making and conflict:** Address occasional points of conflict between public and management – when there is disagreement how is this resolved?
- **RMP:** Consider adding an appendix or section on collaboration to the RMP.

2. New opportunities for collaboration

- **More collaboration with tribes:** Reach out to tribes not yet engaged. Work together on protecting cultural public use.
- **Increased agency participation and coordination:** Involve State Land and U.S. Fish and Wildlife Service. Better coordination amongst all agencies on land resource evaluation.
- **Research:** Take more advantage of Research Ranch and Santa Rita Experimental Range.
- **Expand to other ranches:** Involve other ranches in the watershed, not just Empire.
- **Explore funding opportunities with partners:** Cienega Watershed Partnership available to partner on funding
- **Youth:** Expand youth involvement (i.e. on arroyo restoration work)

Adaptive management: Biological planning

The biological planning process began in 1998, and is a mechanism for annually reviewing monitoring data and providing stakeholders with an opportunity to provide input, based on data, to BLM managers on upcoming decisions. The livestock rotation and forage allocation for the Empire-Cienega allotment is determined annually based on an assessment of range conditions through the biological planning process. The biological planning process serves as a structure to help implement the adaptive management approach described in the LCNCA RMP.

1. What is working well with biological planning

By in large, both staff and collaborators interviewed feel that the biological planning process has been a great success. Many noted how effective the process has been at achieving outcomes on the land. Specifically, those interviewed feel the biological planning process:

- Helps to **build trust** amongst stakeholders and BLM
- Allows the **flexibility** needed to make adjustments on the ground
- Builds and strengthens **partnerships and relationships**

- Includes an impressive and effective **monitoring program**
- Includes appropriate and effective **adaptive management triggers**
- Benefits from strong **stakeholder involvement**
- Is an **open process** where all are welcome to learn and discuss
- Includes effective mechanisms for keeping people updated, particularly the **newsletter**
- Has had many specific success, including work on Chiricahua leopard frog and addressing grass mortality

2. What could be improved with biological planning

- **Strengthen the data-to-decision process:** This is the aspect most frequently mentioned by both staff and collaborators. There needs to be a much clearer understanding, and documentation of, how participant input and monitoring data is linked to decisions. Monitoring needs to be more clearly tied to adaptive management triggers and indicators. The accountability process needs to be more clearly communicated to stakeholders.
- **Adjust technical team structure:** Many contributors suggested that the technical team structure needs to be evaluated. It has worked relatively well, but adjustments in number of teams, team focus, leadership and communication should be evaluated. One person feels the current structure makes decision-making difficult, and takes too much time.
- **Field trips/meetings:** Meetings should be more clearly tied to plan decisions and objectives. It is sometimes unclear to participants what is required of them at meetings. The purpose of stakeholder involvement should be clarified. Some feel meetings try to accomplish too much and are too general. A few people suggest that additional meetings throughout the year could allow time to get into details on specific issues, while still others feel there are too many meetings.
- **Communication:** Stakeholders need better and more frequent updates, including consistent follow-up about how input is being used.
- **Expand area:** Given the success of the process, stakeholders would like to see the focus area expanded beyond the Empire Ranch, and perhaps see it adopted in other areas. A few suggest that it may not be possible to replicate this process in other allotments.
- **Expand Stakeholders:** It would be good to include a wider variety of stakeholders – more recreationists, hunters, etc. Saturday meetings may help widen the audience.
- **Expand focus:** Some feel there is too much focus on grazing, and expansion to include all areas would be beneficial.

IV. Partners

Arizona Game and Fish Department

Brad Fulk, Holly Hicks, Robert Fink, Kristin Terpening, Aaron Miller, Shawn Lowery of the Arizona Game and Fish Department were interviewed by Karen Simms. They expressed concern over the effect of dogs on pronghorn. Feral dogs had been observed near pronghorn on LCNCA and on a few occasions individuals were observed working their bird dogs in the vicinity of pronghorns. They would like to see the pronghorn use area expanded and dog restrictions imposed in those areas. They recommend expanding the fawning season (April 1 – June 30), and developing educational signage for users. They noted that bullfrog barriers around ponds also block pronghorn. Alternate water sources may be needed in those areas.

Work on Black-tailed prairie dog (BTPD) has been successful, and they suggest an additional 300 acres be added to the habitat. There may also be a need to add an objective specific to BTPD to the RMP. Region V staff expressed their interest in favor of beaver reintroduction on the NCA, and suggest an objective on beaver may need to be added as well.

They recommend the prescribed fire work continues, but that off-road collection of tree carcasses is made available to increase the likelihood of carcass removal. Overall vegetation treatments should focus on enhancing connectivity for pronghorn. Finally, they suggest that washes may need to be protected with vehicle barriers.

Cienega Watershed Partnership

Larry Fisher, Trevor Hare, Dave Scalero, and Kelly Mott-LaCroix of the Cienega Watershed Partnership were interviewed. Shela McFarlin provided written input and met with Amy Markstein and Karen Simms. Overall the group feels that the implementation of RMP decisions has been successful, noting in particular the road closure work with Sky Island Alliance, the uplands restoration work, and the flexible grazing/adaptive management process. They suggest implementation needs to be improved on stream and wetland restoration, maintenance of historic sites, and focus on prehistoric sites. They note that road maintenance continues to be an issue, and that partners would like more ongoing input into that process. Cienega Watershed Partnership feels the highest priorities for implementation are riparian restoration work (including arroyo restoration) and recovery of aquatic species.

They note that climate change and catastrophic fires are both missing from the RMP and should be addressed. They would also like to see a more landscape-scale approach to the NCA management, incorporating external impacts (such as Rosemont mine), and addressing connectivity issues across the broader watershed for wildlife.

While they feel the biological planning process has been generally successful, they recommend that the process for moving from data to decisions/actions should be improved, and that stronger accountability to the RMP decisions/objectives is needed. Overall more time should also be given to issues beyond grazing, and the technical team structure may need to be revisited. At times it seems the process is too general and lacks focus.

Vera Earl Ranch, Natural Resources Conservation Service (NRCS), and Agricultural Research Service (ARS)

Ian Tomlinson of the Vera Earl Ranch, Phil Heilman of ARS, and Emilio Carrillo of NRCS were interviewed.

The group feels the RMP decisions remain valid and for the most part these have been implemented successfully. They note that border issues are not addressed in the RMP and increased collaboration with Border Patrol on issues such as wildfire, fence-cutting and off-roading would be desirable.

The RMP mesquite objective (controlling mesquite on 20,000 acres) may need to be revised and warrants further attention. The grass basal and canopy cover objectives were updated to be more ecological site specific about 5 years ago, and these now provide a more realistic tool and better account for variable precipitation patterns. They suggest vegetation monitoring could be improved by incorporating more from State and Transition models.

They feel the biological planning process has been very successful and has helped build trust amongst stakeholders. The strengths include the incorporation of experts and integration of extensive monitoring into the decision-making process.

Tucson Electric Power Company (TEP)

Leslie Carpenter of TEP provided input to Karen Simms by email. She had a couple of suggestions, pertaining to utility corridors. Specifically, she noted that some roads used to access the existing power lines are listed as “Open for Administrative Use Only” and the TEP has assumed that included their use for line maintenance. In addition, she requests that future planning consider another utility corridor to assure future power requirements to Fort Huachuca can be met, and to provide flexibility in avoiding important biological resources.

Appleton-Whittell Research Ranch of the National Audubon Society

Linda Kennedy, Director of the Research Ranch, was interviewed concerning management on BLM land within the ranch, and on the LCNCA in general.

Overall she feels the objectives and decisions in the RMP remain valid, but notes they should be reviewed to accommodate changing conditions, especially with respect to climate change. She suggests that specific objectives are required for Sacaton, Mesquite bosque and Cienega vegetation communities.

She feels monitoring across the NCA is not consistent/comparable. Additionally, the different monitoring systems used by BLM and USFS can make land resource evaluation difficult, and increased collaboration between agencies would be preferable.

She emphasizes the importance of regular prescribed fires to prevent encroachment of shrubs, and is frustrated that ecological use of wildfire has not been used more. As subsoil moisture is very important to the survivability of perennial grasses after fire, she suggests that the prescription for fire should include adequate winter/spring moisture. The parameters for each vegetation type should be determined (upland vegetation, sacaton bottom, etc.) and incorporated into burn plans, both for prescribed fire and for deciding whether to let a wild fire burn or not.

She has concerns about the expansion of non-native vegetation and wants more collaboration with partners on dealing with the invasion of lovegrass species and other non-native plants. The dams on O'Donnell creek are a major concern, as is BLM staff/management turnover and training.

In terms of coordination, she feels that over the years there have been some problems associated with competing land uses and management activities that might have been alleviated if there was a better system for tracking and archiving activities.

She feels the biological planning process has been successful overall, noting the biggest benefit is that all interested parties are invited to participate. She feels there is room for improvement in how monitoring data are incorporated into the decision making process, and that a few additional meetings per year might allow for a more rapid response. She also suggested the focus has thus far been primarily on Empire Ranch, and should possibly be expanded.

Frog and Fish Restoration Outreach Group and the Desert Botanical Garden

Phil Rosen and Dave Hall of Frog and Fish Restoration Outreach Group (FROG), and Andrew Salywon of the Desert Botanical Garden, were interviewed.

While they feel most of the decisions and objectives remain valid, they suggest some should be revisited. Firstly, the frog and fish objectives are broad and could be stepped down. They feel the decision on repressos should be updated with information from the Biological Opinion, and should include language about buffer zones and how to maintain and monitor these sites. The stipulation in the RMP on preventing the spread of chytrid fungus may also need to be revised (discuss with USFWS).

They note that the plan does not address climate change and feel that climate modeling should be incorporated. NCA management needs to have a response to climate change if metapopulations of frogs and fish are to be sustained in the long term. Drought planning also needs to be incorporated.

With respect to species, they feel the fish and frog conservation work and reintroductions have been very successful. They recommend box turtles be included as a priority species.

Watershed and riparian restoration work should be a top priority. They suggest some additional monitoring, including broader biodiversity monitoring and expanded wet-dry mapping. They would like to see water quality and quantity data recently collected by the Desert Botanical Garden incorporated.

They expressed some concern about possible future impacts from Rosemont mine. Fire management is a concern as it relates to water required to suppress fires. There are also some concerns about population growth in neighboring communities and increased pressure on the NCA.

They feel the biological planning process has been successful and they have witnessed a good amount of adaptation with the grazing program and integration with the Frog and Fish Restoration Outreach Group project. Overall they feel the process is sometimes too general and needs to incorporate more public stakeholders. They would like to see more outreach and education into surrounding communities, and feel the BLM should partner more with other agencies on this.

The Nature Conservancy

Gita Bodner of The Nature Conservancy was interviewed.

Gita feels the decisions and objectives in the RMP remain largely valid, but note some areas for improvement. In particular, she suggests that upland objectives could benefit from the “nested” approach developed with stakeholders during discussions of how to allow for flexible responses to climate change without abandoning the clear benchmarks that come from having specific measurable objectives. There could also be better integration among resource areas, for example with recreation and use objectives in the plan. She notes that the RMP does not currently include a drought contingency plan, which would help clarify how preparations and responses could reduce the impacts of severe drought.

She feels that much has been achieved through implementation, particularly on species recovery work and adaptive management. She notes that not every objective is being met, but that setting a high bar for desired resource conditions has been beneficial to collaboration and the land. Moving forward she feels that priorities are to continue the biological planning process and monitoring work, and focus on species recovery and watershed restoration. She thinks erosion control work and restoration in sacaton flats should both be considered. She expressed concerns about potential future impacts from dwindling agency resources and unexpected challenges like the Rosemont mine.

She notes that stakeholders have been more involved in on the ground work than previously planned. To take advantage of this opportunity BLM needs sufficient staff to help coordinate these efforts. She suggests it would be helpful to have better developed contingency plans for when agency staffing and funding changes.

She feels that a lot has been learned in and around the LCNCA since the RMP was signed. There is a good deal of new data/science that can be incorporated, including work on climate change, listed species, uplands and riparian trends, and effectiveness of vegetation treatments. She also suggests that any new monitoring for treatments, restoration and reintroductions be targeted and streamlined so it is easy to collect and use. Research results on the Santa Rita Experimental Range and Walnut Gulch are also especially relevant.

She feels the biological planning process has been very successful, but suggests that the description in the RMP could be updated to reflect the expansion of this process to areas beyond grazing. She recommends that the tech team structure be updated, and that the data to decision process be clarified and better documented, for example via managers reports. Finally, she suggests that a section on collaboration and information sharing could be added to the RMP.

Former Arizona BLM Resource Advisory Council (RAC) Members

Frances Werner and Steve Saway are former Arizona BLM RAC members who live in the area, and remain active in recreation related issues on BLM lands. They were interviewed in the BLM office, and provided some follow-up comments by email.

Overall they feel the decisions in the RMP remain valid, although it is their opinion that many of the recreation objectives have not been fully implemented, and that these objectives lack adequate support. Most notably among these is the failure to establish the Empire-Cienega trail system, which they feel significantly limits the recreational opportunities on the NCA. The RMP objective to establish the North Canyon Trail and its connection to the Arizona National Scenic Trail should still be considered and pursued.

They suggest that Zone 2 recreation objectives have not been met, and recommend that these be revisited along with the objectives regarding designated camp areas and group sites. Only one of four planned camp areas in Zone 2 has been designated. Perhaps some portion of Zone 2 should be changed to Zone 3. The VRM also needs to be revisited, and they suggest VRM 2 is likely not an appropriate designation for the NCA. The objective to fix Wood Canyon remains uncompleted as well.

They feel the road system is in need of priority attention. They feel that roads need design changes and more maintenance to address erosion, which has become severe in areas, and is a safety concern. In particular, backcountry road maintenance is needed to fix safety and erosion issues so that visitors can enjoy accessing Zone 3 and the outlying areas.

Recreational access on the NCA is limited by the deteriorating road conditions. They recommend that the Travel Management Plan be revised. There is a need to designate parking areas and pullouts along the South Road where people can park and unload their trailers.

They suggest that the administrative sites designation for Rose Tree and Cienega be removed, as all the buildings there are gone, and that these be reclassified as historic sites. They note some conflict between vegetation treatments and recreational use, and suggest that Natural Resources Conservation Services State and Transition models be incorporated in grazing and vegetation outcomes.

They feel the biological planning process has been largely successful, but suggest that it is sometimes too general and participants' role in the decision-making process needs to be clarified. They feel the process needs more effective two-way communication, and recommend the stakeholder group be expanded to include members of the public and recreational groups. They also feel the role of the Sonoita Valley Planning Partnership be clarified with respect to the biological planning process. In general, they would like to see more effective public outreach and education, including improved signage and interpretation on the NCA. They suggested that the Arizona State Parks Off-Highway Vehicle (OHV) Ambassador Program could be used to help with visitor contact, signing, and cleanups.

In summary, they feel that BLM has not implemented the Las Cienegas RMP in a balanced fashion. Recreation objectives and management actions appear to lack adequate resource support.

Empire Ranch Foundation

Ron Martin, Carla Kerekes Martin, Gene Raymond, Bill Schock, Ali Boelts, and Alison Bunting from the Empire Ranch Foundation were interviewed in the BLM office. Overall the Empire Ranch Foundation

feels that the RMP decisions remain valid. Decisions have mostly been implemented well, or are being implemented, with the notable exception of the Cultural Resources Project Plan, which has yet to be completed unless it has been completed in the form of the adaptive reuse plan. The group stresses the importance of completing this or developing a more comprehensive vision for restoration of the Empire Ranch Headquarters. They also feel that the BLM has not fully implemented the management of the ranch headquarters as described in the RMP. In addition they feel it would be helpful to have more implementation level plans for specific projects that have been allocated to public use.

They recommend that attention continue to be given to structure stabilization, and note that many of the buildings at the headquarters are not in safe enough condition. The Heritage Trail remains only half-way completed, and the education program needs more attention and coordination. The National Historic Register nomination for the headquarters is almost complete, but needs to be finished.

They feel the partnership with the BLM has been going well, and in particular note the utility of the assistance agreement that is in place. They would like more open communication about the status of deferred maintenance money, and note that internal BLM approval processes often make it very difficult for the Empire Ranch Foundation to fundraise for specific projects and for projects to actually be implemented. They suggest that an Empire Ranch Foundation board member should be part of discussions that pertain to the Empire Ranch. They feel that cultural resources is a low priority within the BLM and they would like to see that changed.

Bird Dog Trial Organization

Norm Ahl, of the Sahuaro Brittany Club, provided input to Karen Simms by email. He noted that the Brittany Club used to hold dog trials at the Airstrip Group Site until a vegetation treatment made the area unsafe and unusable. They moved the trials to Road Canyon, which is the current preferred site. He notes that the Road Canyon site lacks water. He suggested that water might be provided at the Road Canyon site, or the Airstrip could be used again if fire was used to remove the mesquite stubs. The airstrip would be preferable because it has water and a restroom developed at the site.

U.S. Fish and Wildlife Service

Doug Duncan provided written responses to the evaluation questions.

Overall Doug feels the decisions in the RMP remain valid, but suggests that there may be some additional work needed to better identify thresholds and associated actions. He is concerned about the impacts of inadequate funding and staffing, and feels this may limit the effectiveness of planned actions on the NCA. He recommends that the implementation schedule be updated and that work continues to involve partners. It is his opinion that the Rosemont mine, if built, could change or limit how actions on the NCA can be implemented, and would likely require a new analysis of how the desired conditions can be reached.

He recommends that any new amendments to the plan should highlighted climate change, scenario planning, and resiliency. Newly listed species and designated critical habitat should also be assessed.

The change in how repressos/tanks are managed, and the associated Biological Opinion, should be incorporated in an amendment. He suggests that the Cienega Watershed Partnership replace the Sonoita Valley Planning Partnership in any new plan language.

In his opinion, the highest priority for implementation is protecting surface and ground water. Monitoring of surface and ground water also needs to be improved. He also feels there is a good opportunity now to engage partners in protecting and enhancing known wildlife corridors in the area.

Based on his experience, the biological planning process addressing livestock grazing continues to be successful in involving partners, addressing issues, and facilitating communication.

V. General Findings & Recommendations

Findings of this RMP evaluation are organized by the five objectives/questions that drive the evaluation process.

Findings

Do decisions remain relevant to current issues?

For the most part, plan decisions remain relevant to current issues. Many of the issues the plan was created to resolve are still present and relevant. Many issues have been resolved through the RMP decisions, and many others remain “a work in progress.” While overall conditions on the NCA are improving, some issues “remain largely unaddressed.”

In addition, some new issues have emerged in the last 10 years that may have implications to the current decision framework within the RMP. For example, there are no decisions addressing renewable energy development. While it may be appropriate to consider the NCA as an exclusion area for renewable energy development, it might be useful to have a decision specifically addressing it. In addition, considerable research has been done on climate change and models have been developed that indicate possible effects of climate change on the resources within the NCA for which it was created. There may also be methods to modify desired future conditions expressed in the RMP to better reflect potential changes in climate. For example, incorporating information from Natural Resource Conservation Service (Natural Resources Conservation Services) State and Transition models might make desired vegetative conditions more realistic and achievable. Developing or translating existing objectives into nested objectives may also help BLM prioritize which objectives to achieve with uncertain climatic conditions.

Are decisions effective in achieving—or making progress toward achieving— desired outcomes?

Overall the plan decisions are effective in achieving – or making progress toward achieving – goals and objectives described in the LCNCA RMP. Exemplary areas of *effort* include continuation of robust stakeholder engagement in the ten years since the Record of Decision (ROD) was signed; expansion of the biological planning process; reestablishment of the Chiricahua Leopard Frog population through the

Frog and Fish Restoration Outreach Group project; targeted wetland restoration at dirt cattle tanks; ten years of upland monitoring data on Key Areas throughout the NCA; reintroduction of the Black-Tailed Prairie Dog; and implementation of vegetation treatments in upland areas.

Both stakeholders and some staff expressed concern about the implementation of the potential Rosemont Mine in the Santa Rita Mountains and the impact the mine could have on the riparian resources in the NCA. This concern is noted but is outside the scope of the RMP and the RMP evaluations, and is being dealt with separately.

The effectiveness of implementation of some of the plan decisions pertaining to recreation is not clear. It was noted that several of the recreation decisions have not yet been implemented and as a result it is difficult to monitor for the effectiveness of the decisions and whether or not they are achieving desired future conditions.

Overall stakeholders and staff felt that the robust monitoring program and extensive baseline data for NCA resources has made implementation of the LCNCA RMP successful. Both staff and stakeholders did mention the desire to repeat some of the original baseline inventory studies and to compile the monitoring data that has been collected since the ROD was signed.

Do any decisions need to be revised?

Some decisions were noted for revision by management, specialists, and stakeholders alike. For the most part, the changes are not fundamental; rather they are clarifying or correctional in nature.

It was suggested that vegetation objectives be revisited as a result of a changing climate. According to some staff and stakeholders, vegetation objectives may be more obtainable if they incorporated information from the Natural Resources Conservation Services State and Transition Models. Others suggested a different approach to looking at objectives through nested objectives.

Other resource objectives may need to be revised in the future especially if the Rosemont Mine is implemented and impacts resources on the NCA making current resource objectives unobtainable.

The Outdoor Recreation Planner and some stakeholders suggested that the recreation decisions may not be meeting public demand and possibly need to be revised through a plan amendment.

The VRM class for the NCA should be revisited through a VRI and the BLM should look at designating VRM classes on the NCA that allow for the type of restoration and management to achieve the desired conditions outlined in the RMP.

Do any decisions need to be dropped from consideration?

As mentioned earlier, for the most part the decisions remain relevant to planning issues.

Are there any areas that require new decisions?

There are no decisions in the RMP specifically addressing renewable energy development. While it may be appropriate to consider the NCA as an exclusion area for renewable energy development, it might be useful to have a decision to address it.

A Potential Fossil Yield Classification (PFYC) inventory was never done for LCNCA and thus avoidance measures for paleontological resources in the NCA were never identified. It would be good to complete a PFYC inventory and develop some criteria for protecting paleontological resources.

The wilderness assessment that was done at the time of the RMP may not comply with current Bureau standards and policy and should possibly be revisited which could require a new decision in the RMP for Lands with Wilderness Characteristics.

Several stakeholders and some staff brought up that the NCA would benefit from having a drought contingency plan outlined in the RMP as part of the grazing management decisions.

Recommendations

Based on these findings, the SO P&EC make the following recommendations:

1. Conduct an RMP implementation strategy workshop to update both implementation schedules and future budget needs.
2. Consider the recreation decisions in the RMP and evaluate the need for an amendment.
3. Review inventories for visual resources and wilderness characteristics to assure they are consistent with new Bureau standards and policy.
4. Although it is an implementation action, revisit the Travel Management Plan and make needed adjustments to keep it current with RMP objectives.

Additional Actions

Data & Effectiveness Monitoring

Specialists and stakeholders alike commented on the success of the biological planning process and the overall monitoring program for the NCA. Much of this success has stemmed from shared objectives that are founded on baseline inventories done for the majority of the resources on the NCA. There are, however, baseline inventories for several resource areas that still need to be obtained. These include: cultural and paleontological resources; lands with wilderness characteristics; and visual resources.

Specialists and stakeholders brought up some areas where data has been collected but still needs to be analyzed and summarized in a report. Some of these areas include: pre and post vegetation treatment data; trend analysis from the upland monitoring data; trend analysis of the past ten years of riparian and aquatic resource data; analysis and summary of groundwater and surface water monitoring data.

As mentioned above, specialists and stakeholders felt that, overall, LCNCA has a robust monitoring program that ties data to decisions and measures the effectiveness of RMP decisions. Some areas of the monitoring program, however, were suggested for improvement. These include: paring down the post vegetation treatment monitoring program so that it is feasible to implement; consistent monitoring of restoration projects (including arroyo restoration); and monitoring reintroductions. The riparian

monitoring is a well-designed monitoring program but the data needs to be collected and analyzed every five years which has been a challenge with a dwindling BLM staff.

Implementation Decision Prioritization

Many interviewed expressed interest in reevaluating prioritization of decisions for implementation. These decisions include the following: treatment of areas where mesquite encroachment is still occurring on the uplands for wildlife habitat benefit; maintaining upland areas that have previously been treated for mesquite encroachment; updating the Travel Management Plan and implementing the signage and infrastructure for the route network; cleaning up and enhancing the Airstrip Group site; reintroducing the beaver; and maintaining the sacaton floodplains.

Stakeholder Reengagement & Communication

All stakeholders agreed that they were well engaged during the planning process. Most of the stakeholders felt that they have been engaged in the past ten years of LCNCA RMP implementation primarily through the biological planning process. Some stakeholders expressed frustration with a dwindling BLM staff allocated to the NCA, the complex process of obtaining environmental and cultural compliance to implement projects on the ground, and lack of a BLM manager designated to the NCA. Stakeholders are particularly interested in engaging with the BLM on prioritization and scheduling for implementing projects in the NCA going forward. Stakeholders are also interested in continued engagement with the BLM on restoration projects, especially vegetation treatments. Several stakeholders suggested that the BLM evaluate the structure of the biological planning technical teams and ensure that these are organized so that input can be most useful to the BLM.

Appendix A: Interview Schedule

- Monday August 12 - 1-3 pm Heather Swanson, NRS (wildlife)
- **Monday August 12 3-3:30 pm Field and District Managers in-briefing**
- Monday August 12 – 3:30-5 pm Catie Fenn

- Tuesday August 13 - 8-10 am Amy Sobiech (cultural)
- Tuesday August 13 - 10-noon Dan Quintana, Fire/fuels
- Tuesday August 13 - 1-3 pm Kristen Duarte, range

- Wednesday August 14 - 8-10 am Chris Schrager (Service First Historic Preservation Specialist)
- Wednesday August 14 - 10-noon – Steve Saway and Frances Werner
- Wednesday August 14 – 3-5 pm – Emilio Carillo (Natural Resources Conservation Services) and Phil Heilman (ARS)

- Thursday August 15 – 9-noon – Dennis Caldwell and Phil Rosen (Frog and Fish Restoration Outreach Group) and Andrew Salywon (Desert Botanical Garden)
- Thursday August 15 - 1--2 pm – Linda Kennedy (Audubon Research Ranch)
- Thursday August 15 - 2-5 pm, Larry Fisher Trevor Hare, Dave Scalero, Kelly Mott-LaCroix (Cienega Watershed Partnership)

- Friday August 16 - 9 am-noon- Karen Simms, Amy Markstein, Jeff Simms, (Riparian Evaluation Worksheet)
- **Friday August 16 - 1-2 pm Field and District Managers close-out**
- Wednesday January 7, 2015- 9:30-11am, Thursday January 8, 2015- 9-10am, Friday January 9, 2015- noon-2pm, Catie Fenn (Recreation, Visual, Wilderness)
- Friday January 9, 2015- 10-noon, Ron Martin, Carla Kerekes Martin, Gene Raymond, Bill Schock, Ali Boelts, and Alison Bunting (Empire Ranch Foundation)

Appendix B: Riparian Performance Measure Worksheet

PART 1 – Eligibility		
1.1	Name of Resource Management Plan (RMP)	Las Cienegas RMP
1.2	Date of Record of Decision (ROD)	7/25/03
1.3	Date of Evaluation	8/16/13
1.4	Name of Lead Evaluator	Chris Horyza
	Yes/No	Text
1.5	Was the RMP, or an RMP Amendment, ROD signed after 2000?	Yes
1.6	Does the RMP <i>contain</i> goals and objectives related to riparian resources? If Yes , proceed to PART 2 . If No discuss and summarize in the comment cell why this RMP does not contain riparian goals and objectives.	Comments: Yes
If the response to either question 1.5 or 1.6 is 'No', completing the remainder of this worksheet is <i>optional</i> .		
PART 2 - Stressors and Workload Drivers		
<p style="text-align: center;">Stressors</p> <p><i>In the space below, list the major stressors that are impacting riparian resources covered by this RMP. Many stressors may be</i></p>		
2.1.1	Groundwater pumping	
2.1.2	climate change	
2.1.3	watershed condition	
<p style="text-align: center;">Emerging Stressors and Issues</p> <p><i>In the space below, list emerging or future stressors that are not adequately addressed in this RMP, if applicable.</i></p>		
2.2.1	climate change	
2.2.2	Rosemont Mine	
2.2.3	Overdraft of groundwater and need to perfect federal reserved water right	
<p style="text-align: center;">Activities Impacting Workload</p> <p><i>List 3 activities that are having the most significant impact on this FO priorities (Tip - Think about primary activities and benefitting program e.g. easements for O&G or for renewable energy projects, or Land Health Assessments for grazing permit renewals, etc.)</i></p>		
	Activity	Benefiting
2.3.1	SPRNCA RMP	NLCS
2.3.2	Range Permit Renewals	Range Program
2.3.3	Mining and Energy EISs	Minerals and Realty Programs and USFS

PART 3 - Implementation and Effectiveness of Riparian Actions				
<p><i>In the space below, list 5 significant riparian actions (e.g. vegetation treatments, on-the-ground activities) that have been implemented since the ROD was signed. Evaluate the effectiveness of these actions (choose yes or no from the drop down box) and list the data sources to validate your conclusion. If no actions have been implemented, skip to Part 3.3.</i></p>				
	Action Description	Effective	Monitoring/Effectiveness Data Source(s)	
3.1.1	Wetland restoration	Yes	Monitoring data: vegetation, water quality, water level, photo points (note: assisted)	
3.1.2	Tamarisk Control	Yes	Monitoring data: vegetation and gps	
3.1.3	Wet-Dry Monitoring	Yes	Monitoring data: GIS--Shows capability of riparian area recovery and trends	
3.1.4	Arroyo and stream restoration	Yes	Has not been implemented on a broad enough scale yet. Monitor by observation.	
3.1.5	Maintain riparian exclosures and monitor trespass livestock	Yes	PFC and other riparian monitoring (vegetation, channel cross-sections, aquatic habitat,	
3.2	<p>Were any of the above actions unsuccessful because of events beyond your control (i.e. fire, flood, etc.)? If Yes, indicate which action(s) and describe.</p> <p>Proceed to PART 4.</p>	Yes	<p>Explanation: some of the arroyo and stream restoration projects failed due to wildfire and floods but the project was successful overall</p>	
3.3	<p>If no riparian actions have been implemented since the ROD was signed, explain why.</p> <p>Proceed to PART 4.</p>		<p>Explanation:</p>	
PART 4 – Riparian Planning Decisions and Actions				
<p align="center">Linking Actions to RMP Objectives</p> <p><i>Implementation actions should be undertaken in an effort to move the riparian resource toward meeting condition objectives and associated goals, as described in the RMP. The actions from Part 3 (3.1.1-3.1.5) will auto-fill below. Identify and list which RMP resource area(s), RMP objective(s), and RMP goal(s) each action is tied to.</i></p> <p><i>It may also be beneficial to list all other objectives and associated RMP goals related to riparian resources, even if none of the specific actions listed above in 3.1.1-3.1.5 relate. Additional lines are provided to list other objectives. You are encouraged to record RMP objectives and goals relating to varying resources, e.g. riparian, fisheries, recreation, grazing, oil and gas, etc.</i></p> <p><i>If an action cannot be tied to one of the objectives or goals defined in the RMP, please explain why in Part 4.2. For example, if there is not an objective and associated goal in the RMP that the action can be tied to, record whether the RMP is deficient in describing appropriate goals and objectives related to riparian resources or if the action should not have been implemented given the goals and</i></p>				
	Action Description (Auto-filled from lines 3.1.1-3.1.5 above)	Resource Area	RMP Riparian Objective(s)	RMP Goal
4.1.1	Wetland restoration	Wildlife, Fisheries, Land Health, Watershed, TE Species	Land Health 3, WS04, WF01, WF04	Maintain and improve native wildlife habitats
4.1.2	Tamarisk Control	Wildlife, Fisheries, Land Health, and Watershed	Land Health 3, WS03	Maintain and restore native plant diversity and
4.1.3	Wet-Dry Monitoring	Watershed	Land Health 2 and 3,	Protecting water quantity
4.1.4	Arroyo and stream restoration	Wildlife, Fisheries,	Land Health 1 and 2	Maintain and improve watershed
4.1.5	Maintain riparian exclosures and monitor trespass livestock	Wildlife, Fisheries, Land Health, Watershed, TE Species	Land Health 2 and 3, WS03, WS04, WF04	Maintain and improve native wildlife habitats and populations and
4.1.6				
4.1.7				

4.1.8				
4.1.9				
4.1.10				
4.2	<p>If any actions you've provided can not be tied to an RMP objective and associated goal, explain why.</p> <p>If all actions are tied to RMP objectives and goals, proceed to PART 4.2.</p>			
PART 4 (con't) – Riparian Planning Decisions and Actions				
		Yes/No	Text	
4.3	<p>Does this RMP have an implementation strategy for riparian actions?</p> <p>For example, any mechanism(s) for prioritizing actions in the short- and long-term.</p>	Yes	<p>Comments: It is a few years out of date, coordinated resource management plan that was just completed continues the implementation schedule and prioritization</p>	
		Yes/No	Text	
5.4	<p><i>Answer the following question based on the results of PART 1, 2, 3, and 4 as the basis for your response.</i></p> <p>Have the implemented actions been effective in making significant progress toward achieving riparian condition goals defined in the RMP?</p>	Yes	<p>Comments: All riparian goals are currently achieved. Riparian objectives have been achieved for most stream reaches.</p>	
PART 5 - Evaluation Summary				
<i>This represents the conclusion of the evaluation process.</i>				
5.5	Name of Resource Management Plan (RMP)		Las Cienegas RMP	
5.6	Date of Record of Decision (ROD)		7/25/03	
5.7	Date of Evaluation		8/16/13	
5.8	Name of Lead Evaluator		Chris Horyza	
5.9	Review Team Composition			
	Name	Position/Discipline		
5.9.1	Karen Simms	Assistant Field Manager (Former LCNCA RMP Team Lead and Wildlife Biologist)		
5.9.2	Jeff Simms	Fisheries		
5.9.3	Amy Markstein	Planning and Environmental Coordinator (Former Biological Technician)		
5.9.4				
5.9.5				
		Date	Sig	
5.10	Briefing Date and Field Manager Concurrence		/s/ Dave Baker	
5.11	State Riparian Lead Review Date and Concurrence		/s/ Aaron Wilkerson	